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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,379

02/25/2004

Hyung-Joon Kim

YOU102

3388

7590 02/26/2008
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EXAMINER

CAMERON, ERMA C

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

02/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/786,379	Applicant(s) KIM ET AL.	
	Examiner /Erma Cameron/	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,7,8,10,11,13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-8, 10-11, 13-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. The rejection of Claims 1-2 and 7-11 under 35 U.S.C. 102(e) as being anticipated by Reihs et al (6652669) is withdrawn because of the amendment filed 2/14/2008.

3. The rejection of Claims 1-3, 5-11 and 13-14 under 35 U.S.C. 102(b) as being clearly anticipated by JP 10 – 001784 is withdrawn because of the amendment filed 2/14/2008.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 7-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reihls et al (6652669).

‘669 teaches treating aluminum or Al alloy by coating with n-decanethiol in ethanol at 1 g/l (~5 mM) (see Examples).

‘669 does not teach a conc. of 20-50 mM, but it would have been obvious to one of ordinary skill in the art to have optimized the conc. thru no more than routine experimentation.

‘669 teaches n-decanethiol. This is a homolog of the octadecanethiol of claim 3.

‘669 does not teach that the immersion time is 3”-11”, but it would have been obvious to one of ordinary skill in the art to have optimized the contact time through no more than routine experimentation.

Response to Arguments

The applicant has argued that ‘669 does not teach the conc. and time claimed in the independent claims.

However, it is the examiner’s position that the conc. and time of immersion as taught in the examples of ‘669 are merely exemplary, and do not constitute limitations on the process.

Moreover, such differences do not support patentability of subject matter unless there is evidence indicating such parameters are critical. Applicant has not shown this. See MPEP 2144.05 II

6. Claim 1-3, 5, 7-8, 10-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10 - 001784.

‘784 teaches applying 1-octadecane thiol or other alkyl thiols to electro-galvanized steel, in a water-alcohol mixture at 5 millimoles (presumably in one liter), by dipping and drying (see Abstracts; [0007]-[0011] of translation).

‘784 does not teach a conc. of 20-50 mM, but it would have been obvious to one of ordinary skill in the art to have optimized the conc. thru no more than routine experimentation.

‘784 fails to teach length of time for the dipping process, but it would have been obvious to optimize the length of time because the dipping time is known to be a parameter that is important to control in a coating step.

Response to Arguments

The applicant has argued that ‘784 does not teach the conc. and time claimed in the independent claims.

However, it is the examiner’s position that the conc. as taught in the examples of ‘784 is merely exemplary, and does not constitute a limitation on the process. Moreover, such differences do not support patentability of subject matter unless there is evidence indicating such parameters are critical. Applicant has not shown this. See MPEP 2144.05 II.

Art Unit: 1792

Regarding the treatment time, '784 teaches "dipping" (see Examples), which is expected to be of short duration.

Response to Arguments

7. Applicant's arguments filed 2/14/2008 have been fully considered but they are not persuasive.

Regarding the arguments presented about the contact angle of Nozawa, the examiner's position is that Nozawa is not relevant to the above rejections. Nozawa treats iron with thiols, not the metals of independent claims 1 and 13.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Erma Cameron/
Primary Examiner
Art Unit 1792

February 19, 2008